

### **REMARKS/ARGUMENTS**

The present communication responds to the Office Action dated October 16, 2006. In that Office Action, the Examiner rejected Claims 1-8 under 35 U.S.C. § 112, second paragraph. The Examiner further rejected Claims 1-20 under 35 U.S.C. § 103(a). In response, Applicants have amended Claim 1 and added Claims 21-23. Claims 1-23 are pending. In view of the following remarks, Applicants respectfully request reconsideration and allowance of the pending claims.

#### **Rejection under 35 U.S.C. § 112**

Claims 1-8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Particularly, the Examiner asserts that it cannot be said that a method of raising finishing swine translates into slicing bacon slices. The Examiner's rejection is moot in view of Applicants' present amendments. Specifically, Applicants have amended the preamble of Claim 1 to recite "[a] method of raising finishing swine and producing quality pork belly products."

#### **Rejection under 35 U.S.C. § 103**

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Livingston (US Patent 6033176) and Johnston (US Patent 5498434) in view of admitted prior art in the specification at page 1, paragraph [002] and Cook (US Patent 5851572) and further in view of Evans et al. (US Patent 5427802) and Schaub (US Patent 5,215,766) taken with Swine Diet Recommendations (1994, downloaded from <http://www.aces.edu/pubs/docs/A/ANR-0639>) and Practical Swine Feeding Ideas (1995, downloaded from [http://www.animalgenome.org/edu/PIH/prod\\_growing.html](http://www.animalgenome.org/edu/PIH/prod_growing.html)) (collectively "Bulletin References").

Claim 1 is directed to a method of raising finishing swine and producing quality pork belly products. The method comprises, in part, "feeding a daily feed ration to a pig, the daily ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat."

Claim 9 is directed to a method of feeding an animal. The method similarly comprises, in part, “feeding the animal a daily feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat.”

Claim 16 is directed to a feed ration for feeding finishing swine. The feed ration comprises, in part, “0.5 to 5 percent by weight hydrogenated poultry fat.”

None of the references -- Livingston, Johnston, Cook, Evans, Schaub, Swine Diet Recommendations, or Practical Swine Feeding Ideas -- alone or in combination, teach or suggest the invention of Claims 1, 9, or 16, particularly a feed ration comprising “0.5 to 5 percent by weight hydrogenated poultry fat.” Applicants respectfully assert that the Examiner is merely using impermissible hindsight to pool elements of Applicants’ invention from a plurality of separate references to form the combination of Applicants’ invention, where in fact, it is the combination of Applicants’ invention that is novel and unobvious. Furthermore, the teaching or suggestion to combine the references becomes less plausible when the necessary elements can only be found in a large number of references, such as that from which the Examiner has raised the § 103 rejection against Applicants’ invention.

The Examiner asserts that Livingston teaches animal feeds that contain poultry fat. Livingston teaches an animal feed comprising house litter and wastewater sludges:

The instant invention overcomes the above problems by providing a nutritional animal feed and a process for making the animal feed comprising mixing growing house litter with wastewater sludges and drying the mixture to remove water from the mixture.

In more detail, the house litter comprises a component selected from the group consisting of animal (as used hereinafter, the term “animal” includes poultry) excrement, feathers, poultry feed, bedding material, and mixtures thereof. Preferably, the litter comprises a component consisting of poultry manure, poultry feed, and mixtures thereof. The wastewater sludges utilized in the invention include a component selected from the group consisting off at [sic], blood serum, bones, skin, viscera, and mixtures thereof. Preferably, the sludges comprise a component selected from the group consisting of poultry fat, poultry blood serum, poultry bones, poultry skin, poultry viscera, and mixtures thereof, and more

preferably, the sludges comprise poultry fat. *Livingston, Col. 1, ll. 59 – Col. 2, ll. 10.*

As the Examiner points out, Livingston does not teach a feed ration comprising hydrogenated poultry fat. It is not clear how, even were it desirable, the poultry fat used in the animal feed of Livingston could be hydrogenated. Livingston combines house litter with wastewater sludges, the wastewater sludges comprising poultry fat. It is not obvious in any way that the poultry fat of the wastewater sludge could be hydrogenated. Therefore, Livingston does not teach a feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat.

Similarly, the Examiner asserts that Johnston teaches fat containing animal feeds and further teaches the use of poultry fat. Johnston teaches animal feed and, more particularly, pet food. *Johnston, Col. 2, ll. 13-14.* Generally, Johnston teaches adding a combination of at least two to three particular natural antioxidants with animal-fat-containing animal feed to increase the shelf life of the animal feed. *Johnston, Col. 2, ll. 19-23.* The antioxidants are combined with, for example, “refined and bleached poultry (inedible) fat” or “other inedible animal fats.” *Johnston, Col. 3, ll. 1-2.* The amount of antioxidants is based on proportions based on total weight of antioxidant and inedible fat to be protected. *Johnston, Col. 3, ll. 1-24.* Johnston does not teach a feed ration comprising hydrogenated poultry fat. Johnston specifically teaches that the antioxidants compositions are admixed with animal fat prior to incorporating the animal fat in animal feed (including pet food), which is otherwise prepared in established and conventional fashion. *Johnston, Col. 3, ll. 53-57.* Established and conventional fashion does not include hydrogenating poultry fat. Additionally, Johnston does not teach a feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat.

Cook fails to remedy the deficiencies of Livingston and Johnston. Cook teaches that the only method previously known to assure a firm fat was to feed animals fats or oils high in saturated fats. The method of Cook specifically comprises feeding meat animals a conjugated linoleic acid, which is an unsaturated fat, which counteracts the adverse effects of the increased unsaturated fat in the diet of meat animals and results in the production of meat of improved quality having a firmer fat. *Cook, Col. 1, ll. 45-50.* Cook does not teach a feed ration comprising poultry fat. More specifically, Cook does not teach a feed ration comprising

hydrogenated poultry fat. Therefore, Cook does not teach a feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat.

Furthermore, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). As previously discussed, Cook teaches feeding meat animals a conjugated linoleic acid, which is an unsaturated fat, which counteracts the adverse effects of the increased unsaturated fat in the diet of meat animals and results in the production of meat of improved quality having a firmer fat. Cook cannot properly be combined with Livingston, Johnston, or Schaub to make obvious a novel and unobvious combination comprising, in part, a daily feed ration “comprising 0.5 to 5 percent by weight hydrogenated poultry fat” for generating pork bellies having a higher concentration of saturated fats.

Evans fails to remedy the deficiencies of Livingston, Johnston, and Cook. Evans teaches a feed supplement which includes the use of highly saturated fats. Evans specifically teaches that the selected fatty acids should either have an iodine value, or be saturated to the point that the iodine value thereof is, between 5 and 35, and preferably in the range of 16-20. Evans further teaches that certain saturated or highly saturated animal fats such as tallow, lard, and grease are relatively low in value, easier to saturate or hydrogenate, are more readily available, have lower costs than higher iodine vegetable oils, and are therefore more economical in achieving the desired iodine value. Thus, Evans teaches the use of tallow, lard, or grease having iodine values between 5 and 35 in feed supplements. Each of the independent Claims 9 and 16 recite hydrogenated poultry fat having an iodine value of between about 30 and about 60. The Examiner argues that it would be obvious to optimize the iodine values since it is known that the iodine value is a means to measure the degree of saturation required and that the lower the iodine value, the higher the hydrogenation. Given Evans’ specific teaching of a range of iodine values between 5 and 35 and the assertion therein that it was a surprising discovery that the addition of highly saturated fats (TV=5-35) to the diet produces significant weight gain rate advantages, it would not be obvious to modify the invention of Evans to a different range of iodine values. Indeed, such modification would be against the specific teaching of Evans.

Evans further does not teach the use of poultry fat, and more particular hydrogenated poultry fat. Therefore, Evans does not teach a feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat as recited in Applicants' independent claims.

Schaub fails to remedy the deficiencies of Livingston, Johnston, Cook, and Evans. Schaub teaches fats fed to animals and, more particularly, fats from readily available sources such as lard, tallow, fish, oils, and the like. Schaub specifically teaches hydrogenating fats to provide feeding fats in large quantities:

The purpose of the present invention is to offer the possibility of feeding fat in large quantities, i.e., in excess of about 5%, in a form which does not cause disorders of the digestive process even of ruminants, and which can nevertheless be completely resorbed. *Schaub, Col. 1, ll. 49-53 (emphasis ours).*

This is done by "feeding to the animals fats in powdered or particulate form, wherein the fats have a melting point above the body temperature of the animals . . ." *Schaub, Col. 1, ll. 59-62*. That is, "only those fats exhibiting a melting point above the body temperature of the animals to be fed are suitable for preparing the powdered fat according to the invention." *Schaub, Col. 3, ll. 4-7*. Furthermore, only fats exhibiting a melting point below the body temperature of the animals to be fed are hydrogenated. Schaub teaches that non-hydrogenated fats that exhibit a melting point above the body temperature of the animals to be fed do not otherwise need to be hydrogenated. *Schaub, Col. 3, ll. 25-27*. They may, however, be hydrogenated when they are derived from a mixture including fats that exhibit a melting point below the body temperature of the animals to be fed. *Schaub, Col. 3, and ll. 27-36*. Schaub teaches that by raising the melting point of the fats exhibiting a melting point below the body temperature of the animals to be fed, "fat portions exceeding 5% can be added and fed in the ration." *Schaub, Col. 2, ll. 5-6*. In fact, Schaub teaches that "amounts of at least about 5% should be used to take advantage of the unique characteristics of the fat powder of this invention and amounts of up to about 25% or more of the ration are suitable." *Schaub, Col. 4, ll. 13-18*. Thus, Schaub specifically teaches feeds having fat in excess of about 5% and does not teach a feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat.

Finally, the Bulletin References, Swine Diet Recommendations and Practical Swine Feeding Ideas, fail to remedy the deficiencies of Livingston, Johnston, Cook, Evans, and Schaub. The Examiner asserts that the Bulletin References teach that the fat content of a typical feed is in the range 3-5% and the maximum level of fat in a swine diet is 8%. Applicants respectfully assert that the combination of the Bulletin References with either Schaub or Evans is improper because, as a first matter, there is no reason, suggestion, or motivation found in the these references, whereby a person of ordinary skill in the field of the invention would make the combination. The Examiner is respectfully reminded that “[t]here must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination” and “[t]hat knowledge can not come from the applicant's invention itself.” *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

The Bulletin References generally disclose the incorporation of animal fat into pig feed. Importantly, neither of the Bulletin References teach incorporation of hydrogenated animal fat, particularly the percentage by weight of hydrogenated animal fat, and more particularly hydrogenated poultry fat. There is no motivation in the art, nor does the Examiner cite such motivation, to combine references disclosing the use of fat in animal feed, generally, with those that disclose feeds incorporating hydrogenated fats. Indeed, Evans generally teaches away from the use of fat in pig feed. Evans, as previously discussed, teaches that “pork obtained from swine which have been subjected to a diet containing a supplement of unsaturated fats alone,” has been found to suffer severely in quality. *Evans et al.*, Col. 1, ll. 50-65. Furthermore, Schaub discloses suitable animal feed rations with a hydrogenated animal fat content of up to about 25 % or more by weight. *Schaub*, Col. 4, ll. 17-18. Such a teaching directly contradicts the teachings of the Bulletin References, which disclose feeds should have a maximum animal fat content of 8%. Accordingly, a person of ordinary skill in the field of the invention would not have any reason, motivation, or suggestion to make such a combination.

Accordingly, none of the references -- Livingston, Johnston, Cook, Evans, Schaub, Swine Diet Recommendations, or Practical Swine Feeding Ideas -- alone or in combination, teach or suggest a daily feed ration comprising 0.5 to 5 percent by weight hydrogenated poultry fat, and therefore, the invention of Claims 1, 9, or 16. Claims 2-8 and 21-23, which depend from Claim

1, incorporate all the limitations of Claim 1. Claims 10-15, which depend from Claim 9, incorporate all the limitations of Claim 9. Claims 17-20, which depend from Claim 16, incorporate all the limitations of Claim 16. Thus, Claims 1-23 are not made obvious by Livingston, Johnston, Cook, Evans, Schaub, Swine Diet Recommendations, nor Practical Swine Feeding Ideas, alone or in combination.

**CONCLUSION**


This application now stands in allowable form and reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized to charge Deposit Account No. 04-1420 for the additional claim fees generated by this paper. The Commissioner is also hereby authorized to charge any fee deficiency associated with this paper to Deposit Account No. 04-1420.

Respectfully submitted,

DORSEY & WHITNEY LLP  
Customer Number 25763

Date: Dec. 18, 2006

By:   
Devan V. Padmanabhan. No. 38,262  
(612) 343-7990